Operations with i - Addition and Subtraction

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By the same logic, if we had 3 cats plus 2 cats, we would have 5 cats

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Where a, b are both real numbers

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Note: Even though b is a Real Number, we call it the Imaginary part because it gets multiplied by i

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Example: $(1 + 2\mathrm{i}) + (6 + 4\mathrm{i})$

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What if we add two Complex Numbers?

Example: $(1 + 2\mathrm{i}) + (6 + 4\mathrm{i}) = 1 + 6 + 2\mathrm{i} + 3\mathrm{i}$

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Example: $(1 + 2\mathrm{i}) + (6 + 4\mathrm{i}) = \underbrace{1 + 6}_{7} + \underbrace{2\mathrm{i} + 4\mathrm{i}}_{6\mathrm{i}}$

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